

WHAT IS CLAIMED IS:

1. An ink jet printing apparatus to form an image by using a print head capable of ejecting ink from its  
5 ejection openings, the printing apparatus comprising:

wiping means for wiping an ejection opening formed face of the print head in which the ejection openings are formed;

10 preliminary ejection means for ejecting ink not contributing to an image forming from the ejection openings of the print head; and

15 modifying means for changing, according to event history information of the print head, the number of ink droplets to be ejected by the preliminary ejection means following a wiping operation of the wiping means.

2. An ink jet printing apparatus according to claim 1, wherein the event history information of the print head is a cumulative count of wiping operations  
20 of the wiping means.

3. An ink jet printing apparatus according to claim 2, wherein the modifying means increases the number of ink droplets to be ejected by the  
25 preliminary ejection means as the cumulative count of wiping operations increases.

4. An ink jet printing apparatus according to  
claim 1, wherein the event history information of the  
print head is a cumulative printed dot number  
representing a cumulative number of ink droplets  
5 ejected from the print head.

5. An ink jet printing apparatus according to  
claim 4, wherein the modifying means increases the  
number of ink droplets to be ejected by the  
10 preliminary ejection means as the cumulative printed  
dot number increases.

6. An ink jet printing apparatus according to  
claim 1, wherein the event history information of the  
15 print head is a cumulative time in which the print  
head is mounted in the ink jet printing apparatus.

7. An ink jet printing apparatus according to  
claim 6, wherein the modifying means increases the  
20 number of ink droplets to be ejected by the  
preliminary ejection means as the cumulative print  
head mounting time increases.

8. An ink jet printing apparatus according to  
25 claim 1, wherein the event history information of the  
print head is a time which elapses from a wiping  
operation of the wiping means to a start of a printing

operation on a printing medium.

9. An ink jet printing apparatus according to  
claim 8, wherein the modifying means decreases the  
5 number of ink droplets to be ejected by the  
preliminary ejection means as the elapsed time  
increases.

10. An ink jet printing apparatus according to  
10 claim 1, further comprising:

memory means for storing the event history  
information of the print head;

wherein the modifying means changes, according to  
the event history information stored in the memory  
15 means, the number of ink droplets to be ejected by the  
preliminary ejection means following the wiping  
operation of the wiping means.

11. An ink jet printing apparatus according to  
20 claim 1, wherein the event history information is  
information related to a degradation of repellency of  
the ejection opening formed face of the print head.

12. A print head recovery device to perform a  
25 recovery operation to maintain an ink ejection  
performance of a print head in good condition, the  
print head being capable of ejecting ink from its

ejection openings, the print head recovery device comprising:

wiping means for wiping an ejection opening formed face of the print head in which the ejection openings  
5 are formed;

preliminary ejection means for ejecting ink not contributing to an image forming from the ejection openings of the print head; and

modifying means for changing, according to event  
10 history information of the print head, the number of ink droplets to be ejected by the preliminary ejection means following a wiping operation of the wiping means.

13. A print head recovery method for performing a recovery operation to maintain an ink ejection performance of a print head in good condition, the print head being capable of ejecting ink from its ejection openings, the print head recovery method comprising the steps of:

20 using wiping means for wiping an ejection opening formed face of the print head in which the ejection openings are formed and preliminary ejection means for ejecting ink not contributing to an image forming from the ejection openings of the print head; and

25 changing, according to event history information of the print head, the number of ink droplets to be ejected by the preliminary ejection means following a

wiping operation of the wiping means.